

THE OFFICE OF REGULATORY STAFF

DIRECT TESTIMONY AND EXHIBITS

OF

A. RANDY WATTS

March 5, 2009



DOCKET NO. 2009-2-E

**Annual Review of Base Rates for Fuel Costs
of South Carolina Electric & Gas Company**

PUBLIC/REDACTED VERSION

DIRECT TESTIMONY OF**A. RANDY WATTS****ON BEHALF OF****THE SOUTH CAROLINA OFFICE OF REGULATORY STAFF****DOCKET NO. 2009-2-E****IN RE: ANNUAL REVIEW OF BASE RATES FOR FUEL COSTS****OF SOUTH CAROLINA ELECTRIC & GAS COMPANY****Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND OCCUPATION.**

A. My name is Randy Watts. My business address is 1401 Main Street, Suite 900, Columbia, South Carolina 29201. I am employed by the State of South Carolina as Program Manager of the Electric Department for the Office of Regulatory Staff ("ORS").

Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A. I received a Bachelor of Science Degree in Electrical Engineering from the University of South Carolina in Columbia in 1976. I was employed at that time by the Public Service Commission of South Carolina ("Commission") as a Utilities Engineer in the Electric Department and was promoted to Chief of the Electric Department in August 1981. Subsequent to internal Commission restructuring, my position was redesignated Chief of Electric in October 1999. I remained in that role until transferring to my current position with ORS in January 2005. I have testified on numerous occasions before this Commission in conjunction with fuel clause, complaint, territorial assignment, Siting Act and general rate proceedings.

PUBLIC/REDACTED VERSION**THE OFFICE OF REGULATORY STAFF
1401 Main Street, Suite 900, Columbia, SC 29201**

1 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

2 **A.** The purpose of my testimony is to set forth ORS Electric Department's findings
3 and recommendations resulting from its examination and review of the South Carolina
4 Electric & Gas Company's ("SCE&G" or "Company") fuel expenses and power plant
5 operations used in the generation of electricity to meet the Company's retail customer
6 requirements.

7 **Q. WHAT AREAS WERE ENCOMPASSED IN YOUR REVIEW OF THE**
8 **COMPANY'S FUEL EXPENSES AND PLANT OPERATIONS?**

9 **A.** In preparation for this proceeding, the Electric Department reviewed, among other
10 materials and documents, the Company's monthly fuel reports including power plant
11 performance data, unit outages, and generation statistics. Comparisons and analysis of
12 actual to original estimates were performed for both megawatt-hour sales and fuel costs.

13 **Q. WHAT ADDITIONAL STEPS WERE TAKEN IN ORS'S REVIEW OF THE**
14 **COMPANY'S PROPOSAL IN THIS PROCEEDING?**

15 **A.** Numerous meetings were held with various SCE&G personnel representing a
16 variety of areas of expertise to discuss and review the Company's fossil and nuclear fuel
17 procurement; fuel transportation; environmental cost and compliance procedures;
18 nuclear, fossil and hydro generating plant's performance; plant dispatch; forecasting;
19 resource planning; and general Company policies and procedures. These meetings
20 occurred at ORS and SCE&G Headquarters in Columbia, S.C. Additionally, ORS keeps
21 abreast of the coal and natural gas industries including transportation through industry
22 publications on a daily basis. During this review period, ORS also conducted on-site
23 visits of both the Williams coal-fired and V.C. Summer nuclear generation stations.

1 **Q. WHAT DID ORS DETERMINE FROM ITS EXAMINATION OF THE**
2 **COMPANY'S PLANT PERFORMANCE FOR THE REVIEW PERIOD?**

3 **A.** ORS reviewed the performance of the Company's generating facilities to
4 determine if the Company made reasonable efforts to minimize fuel costs. The review
5 period includes the actual period from February 2008 through December 2008, the
6 estimated period from January 2009 through April 2009, and the forecast period from
7 May 2009 through April 2010. ORS reviewed the availability of the Company's major
8 power plants. Exhibit ARW-1 page 1 of 2 shows the monthly availability of the
9 Company's major generating units stated in percentages. The corresponding capacity
10 factors in Exhibit ARW-1 page 2 of 2 indicate the monthly utilization of each unit in
11 producing power.

12 **Q. PLEASE EXPLAIN THE SIGNIFICANCE OF PLANT AVAILABILITY AND**
13 **HOW IT IS USED IN ORS'S EVALUATION OF THE COMPANY'S PLANT**
14 **PERFORMANCE.**

15 **A.** Exhibit ARW-2 shows the Company's major fossil and nuclear units summary of
16 outages for the review period. With reference to Exhibit ARW-1, in months where
17 generation units show zero availability as well as those months showing less than 100%
18 availability led us to examine the reasons for such occurrences. Exhibits ARW-1 and
19 ARW-2 were used to evaluate the Company's plant operations. As an example, Exhibit
20 ARW-1 shows that Cope had 0.00% availability in the months of September and October
21 2008. Exhibit ARW-2 indicates the reason for the 0.00% availability as being the
22 scheduled eleven week outage for Selective Catalytic Reactor ("SCR") installation
23 between August 31, 2008 and November 12, 2008; therefore, the unit was not available

1 to generate electricity during this time frame due to these planned activities being
2 performed.

3 **Q. PLEASE EXPLAIN HOW THE OTHER OUTAGES ARE REPRESENTED ON**
4 **EXHIBIT ARW-2?**

5 **A.** Exhibit ARW-2 provides explanations for major fossil unit outages of 100 hours
6 or greater although our review includes all outages. Exhibit ARW-2 also provides
7 explanations for all nuclear plant outages during the review period.

8 **Q. PLEASE ADDRESS THE OUTAGES AT THE VC SUMMER NUCLEAR**
9 **STATION.**

10 **A.** Exhibit ARW-2 page 3 of 3 shows one forced and one planned outage during the
11 review period. ORS reviewed these outages including associated Nuclear Regulatory
12 Commission ("NRC") documents, and determined that the Company responded
13 appropriately during both outages. Despite the two outages during the review period, the
14 VC Summer nuclear station operated efficiently with an actual availability factor of
15 85.1% and an actual capacity factor of 84.8%. The VC Summer nuclear unit was refueled
16 during this review period between April 25, 2008 and June 14, 2008. VC Summer is on
17 an approximate 18 month refueling cycle, and is scheduled to begin its next refueling
18 outage in October 2009.

19 **Q. WHAT WERE THE RESULTS OF ORS'S ANALYSIS OF THE COMPANY'S**
20 **PLANT OPERATIONS FOR THE PERIOD UNDER REVIEW?**

21 **A.** ORS's review of the Company's operation of its generating facilities concluded
22 that the Company made reasonable efforts to maximize unit availability.

1 **Q. WHAT WERE THE RESULTS OF ORS'S REVIEW OF THE GENERATION**
2 **MIX AND BASELOAD UNIT FUEL COSTS UTILIZED BY THE COMPANY**
3 **DURING THE REVIEW PERIOD?**

4 **A.** Exhibit ARW-3 shows the monthly generation mix for the review period by
5 generation type. As shown in this Exhibit, the combined-cycle natural gas-fired plants,
6 which include both Jasper and Urquhart, are trending to contribute higher percentage
7 generation throughout the period as system demand increases. This is in contrast to
8 previous dispatch patterns where these plants were more routinely operated during the
9 summer and winter peak months with lower percentage generation during the non-peak
10 periods.

11 In addition, Exhibit ARW-4 shows the average fuel costs for the major generating
12 plants on the Company's system for the review period and the megawatt-hours produced
13 by those respective plants. VC Summer generation represents SCE&G's 2/3 ownership
14 percentage in the plant. The chart shows the lowest average fuel costs at the VC Summer
15 Nuclear Station being 0.46 cents/kWh and the highest average fuel costs at the Jasper and
16 Urquhart natural-gas fired combined cycle plants being 8.11 and 9.30 cents/kWh,
17 respectively. The Company utilizes economic dispatch which generally requires that the
18 lower cost units are dispatched first.

19 **Q. HAS ORS REVIEWED THE ACCURACY OF THE COMPANY'S SALES**
20 **FORECAST FOR THE REVIEW PERIOD?**

21 **A.** Yes. As shown in Exhibit ARW-5, the Company's actual megawatt-hour sales
22 versus forecasted sales varied by 2.72% during the review period.

1 **Q. HAS ORS REVIEWED THE ACCURACY OF THE COMPANY'S FUEL COST**
2 **FORECAST FOR THE REVIEW PERIOD?**

3 **A.** Yes. In addition, Exhibit ARW-6 shows the monthly variance between projected
4 and actual fuel cost in cents/kWh for the review period. This Exhibit shows the
5 cumulative average projected fuel cost level for the period was 21.27% below the actual
6 resulting cost level.

7 **Q. WHAT OTHER INFORMATION HAS ORS REVIEWED IN MAKING ITS**
8 **DETERMINATIONS IN THIS PROCEEDING?**

9 **A.** Exhibit ARW-7 shows ending period balances of fuel costs beginning July 1979.
10 The Company has experienced both under-recovery and over-recovery balances
11 throughout the approximate thirty year period. As of December 2008, the Company was
12 experiencing a cumulative under-recovery of \$130,199,721.

13 **Q. WHAT OTHER SOURCES OF INFORMATION DOES ORS USE IN**
14 **DETERMINING THE REASONABLENESS OF A UTILITY'S REQUEST FOR A**
15 **FUEL COST COMPONENT?**

16 **A.** ORS routinely 1) reviews private and public industry publications as well as those
17 available on the Energy Information Administration's ("EIA") website; 2) conducts
18 meetings with Company personnel; 3) attends industry conferences; and 4) reviews
19 information as filed monthly by electric generating utilities on Form EIA-923.

20 **Q. DID ORS REVIEW ADDITIONAL INFORMATION IN DETERMINING THE**
21 **REASONABLENESS OF THE COMPANY'S FORECAST?**

22 **A.** Yes. ORS reviewed the forecasted maintenance schedules for the Company's
23 major generating units as well as the Company's fuel price forecast for nuclear, coal, and

1 natural gas. The Company continues to utilize the PROSYM® computer model to project
2 fuel costs. PROSYM® is an accepted computer model utilized by utility companies
3 throughout the country for fuel cost projections. ORS also reviewed the Company's load
4 forecasting and dispatch procedures.

5 **Q. DID ORS REVIEW THE COMPANY'S PROPOSAL TO COMPLY WITH THE**
6 **CHANGES IN THE RECOVERY OF CERTAIN VARIABLE**
7 **ENVIRONMENTAL COSTS AS REQUIRED BY S.C. CODE ANN. SECTION 58-**
8 **27-865(A) (1) (SUPP. 2008)?**

9 **A.** Yes. ORS reviewed the Company's proposal to calculate the variable
10 environmental component of costs based on firm peak demand for the Residential, Small
11 General Service, Medium General Service, Large General Service/Industrial, and
12 Lighting customer classes. The allocation of variable environmental costs, both incurred
13 and projected, based on firm peak demand distributes the costs to each customer class as
14 required by statute.

15 **Q. HOW DOES THE COMPANY ACCOUNT FOR REVENUES RECEIVED FOR**
16 **THE SO2 CREDIT PORTION OF OFF-SYSTEM SALES?**

17 **A.** These revenues are accumulated over time in a separate balance sheet account
18 until the Company has requirements for additional allowances. The Company then uses a
19 portion of the funds to purchase allowances.

20 **Q. WHAT IS THE STATUS OF THE ACCOUNT BALANCE AS OF DECEMBER**
21 **2008?**

22 **A.** The SO2 account balance through December 2008 is \$14,081,647.

1 **Q. WHAT RECOMMENDATION DOES ORS PROPOSE FOR THIS ACCOUNT**
2 **BALANCE?**

3 **A.** In an effort to help mitigate the proposed increase in this case ORS recommends
4 the account balance be applied to the Company's SC retail cumulative environmental fuel
5 cost account balance. This would result in an approximate reduction of 83 cents from the
6 proposed increase on an average monthly residential bill for 1000 kWh. The Company is
7 currently in the process of installing scrubbers at both the Wateree and Williams Stations
8 which are scheduled to be on line and tested during the summer and fall of 2009. The
9 addition of this equipment should significantly reduce the Company's need to purchase
10 SO2 allowances in the future, and as a result this recommendation should not cause an
11 adverse impact to SCE&G's operations and it is also beneficial to the ratepayers.

12 **Q. DID ORS MAKE OTHER FINDINGS DURING ITS REVIEW OF THE**
13 **COMPANY'S COAL PROCUREMENT PRACTICES?**

14 **A.** Yes. ORS's review found that the Company made coal sales from Williams
15 Station to industrial facilities but did not fully credit the retail ratepayer for the sales. To
16 ensure the transactions do not adversely impact the retail ratepayer, the sales should have
17 been credited to the ratepayer based on the greater of Williams Station's average
18 inventory coal cost or the cost of spot or contract coal received at Williams Station during
19 the month of the sale. Accordingly, ORS recommends a reduction to SC retail fuel
20 expenses of \$384,617.

21 **Q. HAS ORS DETERMINED THE CORE CAUSES OF THE COMPANY'S**
22 **REQUEST FOR AN INCREASE IN THE FUEL FACTOR ASSOCIATED WITH**
23 **THIS PROCEEDING?**

1 **A.** Yes. Through ORS's review process, we believe the primary drivers causing the
2 increase in the fuel factor are the non-performance of contract coal suppliers, the freight
3 rates associated with the Company's new railroad contract and some new long-term
4 contracts for coal.

5 **Q. PLEASE EXPLAIN HOW THE NON-PERFORMANCE OF CONTRACT COAL**
6 **SUPPLIERS CONTRIBUTED TO THE COMPANY'S REQUEST FOR AN**
7 **INCREASE IN THE FUEL FACTOR.**

8 **A.** During the review period, ORS found eight contract coal suppliers that did not
9 timely deliver coal. This resulted in the non-delivery of over [REDACTED] of coal. Some
10 of the non-deliveries were due to force majeure issues with some of the contract
11 suppliers. Consequently, it was necessary for the Company to purchase replacement coal
12 on the spot market at a price higher than the contract prices. The Company estimates the
13 replacement cost due to non-delivered coal to be approximately [REDACTED] on a retail
14 basis. Ideally, the Company strives to maintain 75-80% of their coal purchases through
15 long-term contracts and the remaining through short-term contract purchases to protect
16 the ratepayers from adverse market fluctuations. However, during the review period,
17 these non-deliveries caused the Company's target ratio of long-term contract coal supply
18 to decrease to 55% and the short-term contract coal supply to increase to 45%.

19 **Q. WHAT STEPS HAS THE COMPANY TAKEN TO ADDRESS THESE NON-**
20 **DELIVERIES?**

21 **A.** As stated in Company witness Haimberger testimony, the Company has initiated
22 or will initiate action to attempt to recover the additional costs associated with the non-
23 deliveries where it determines there is justification to pursue such actions. ORS has

1 requested the Company provide periodic updates to track the success of the Company's
2 actions. Any successful cost recoveries should be applied to the fuel cost account and
3 returned to the retail ratepayers through the Company's Adjustment for Fuel and Variable
4 Environmental Cost tariff.

5 **Q. PLEASE EXPLAIN HOW THE NEW FREIGHT RATES CONTRIBUTED TO**
6 **THE COMPANY'S REQUEST FOR AN INCREASE IN THE FUEL FACTOR.**

7 **A.** Beginning January 1, 2009, the Company's newly negotiated contract with CSXT
8 Railroad became effective. The terms of this new contract resulted in a significant
9 increase in the rail transportation cost for coal. ORS estimates this increase to be at least
10 [REDACTED] than the Company's previously contracted rates with CSXT. For this
11 review period, ORS estimates the increased rail rates will add approximately [REDACTED]
12 in transportation costs for the retail ratepayers. Given the exorbitant increase in
13 transportation costs associated with the Company's new railroad contract, ORS is
14 attempting to determine if all electric suppliers in the State have been impacted by similar
15 increases in rail rates. ORS considers this matter to be of such significance that it may
16 warrant filing with the Surface Transportation Board ("STB") or other appropriate forum.

17 **Q. PLEASE EXPLAIN HOW SCE&G'S LONG-TERM CONTRACTS**
18 **CONTRIBUTED TO THE COMPANY'S REQUESTS FOR AN INCREASE IN**
19 **THE FUEL FACTOR.**

20 **A.** During ORS's review, it was noted that there were [REDACTED] long-term coal contracts
21 initiated where the purchase price was greater than [REDACTED]. These [REDACTED] contracts
22 were secured during a time in which the market price for coal was unusually high. ORS
23 estimates SCE&G's commitments for coal purchases under these contracts equate to

1 approximately [REDACTED] above current coal prices on a retail basis for the review
2 period. However, ORS recognizes that these contracts were signed to ensure an adequate
3 supply of coal and to maintain reliability of service.

4 **Q. WHAT IS THE CUMULATIVE EFFECT OF THESE MAJOR COST DRIVERS?**

5 **A.** The combination of these three factors alone is estimated to contribute over [REDACTED]
6 [REDACTED] more in SC retail costs for the review period. ORS conducted extensive audit
7 reviews and analyses of these cost factors and will continue to track and monitor the
8 Company's progress in seeking relief from the non-performing coal suppliers as well as
9 the increased costs associated with the other contracts and agreements.

10 **Q. DOES ORS HAVE ANY OTHER RECOMMENDATION TO OFFER IN THIS**
11 **PROCEEDING?**

12 **A.** Yes. The Company's testimony acknowledges its proposed fuel factors represent
13 a significant increase in costs to its retail ratepayers and has offered to delay collection of
14 one half of the unrecovered balance plus interest until the next fuel billing period
15 beginning May 2010. Due to the significant amount of increase requested and also
16 considering the adverse economic conditions, ORS recommends that the unrecovered
17 balance be further mitigated by spreading these costs over an additional twelve month
18 period for a total of three years. ORS also recommends that carrying costs for this 3-year
19 amortization, if approved, be based on a 3-year compounded U.S. Government Treasury
20 Note rate plus 65 basis points instead of the Company's proposed 10-year Treasury Bill
21 rate with the 65 basis points. These are extraordinary times with respect to fuel
22 purchasing and this additional measure of relief for the retail ratepayers is reasonable,
23 appropriate and warranted.

1 **Q. WHAT ARE THE BASE FUEL COST AND ENVIRONMENTAL FACTORS BY**
2 **CLASS RESULTING FROM ORS'S RECOMMENDATIONS IN THIS**
3 **PROCEEDING?**

4 **A.** As shown on Exhibit ARW-8, the Base Fuel Cost Component is 3.621 cents per
5 kilowatt-hour. The resulting Environmental Fuel Cost Components in cents/kWh can be
6 found on Exhibit ARW-9.

7 The resulting combined Fuel Factor Components in cents/kWh by class can be found on
8 Exhibit ARW-10 which shows the following:

9 Residential Service	3.671
10 Small General Service	3.662
11 Medium General Service	3.654
12 Large General Service	3.646
13 Lighting Service	3.621

14 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

15 **A.** Yes, it does.

Office of Regulatory Staff
Power Plant Performance Data Report
Availability Factors (Percentage) for
South Carolina Electric & Gas Company

PLANT	UNIT	HISTORICAL DATA				REVIEW PERIOD (ACTUAL) DATA												Average Review Pd.
		NET MW RATING	YEAR 2006	YEAR 2007	YEAR 2008	FEB 2008	MAR 2008	APR 2008	MAY 2008	JUN 2008	JUL 2008	AUG 2008	SEP 2008	OCT 2008	NOV 2008	DEC 2008		
CANADYS	1	105	84.0	57.0	86.1	100.0	100.0	100.0	52.6	100.0	100.0	86.9	91.2	90.9	86.8	30.6	85.3	
CANADYS	2	115	87.8	87.2	66.7	0.0	22.3	92.2	100.0	92.6	100.0	91.4	96.7	77.3	0.0	94.9	69.8	
CANADYS	3	185	87.6	87.3	82.0	91.6	91.9	45.6	94.8	97.4	83.7	91.3	89.4	43.6	77.1	89.3	81.4	
COPE		420	94.6	92.2	75.9	100.0	88.1	69.1	100.0	100.0	100.0	99.8	0.0	0.0	59.3	99.0	74.1	
McMEEKIN	1	125	88.2	94.2	88.0	100.0	2.2	100.0	100.0	100.0	100.0	100.0	92.6	72.8	91.3	97.1	86.9	
McMEEKIN	2	125	88.2	66.6	91.2	100.0	60.8	85.4	100.0	100.0	100.0	93.9	100.0	54.7	100.0	100.0	90.4	
URQUHART	3	94	93.4	94.4	87.5	100.0	100.0	32.8	90.5	95.7	100.0	82.6	100.0	100.0	84.1	64.5	86.4	
WATEREE	1	350	90.5	79.1	94.3	93.6	90.9	64.2	100.0	100.0	100.0	100.0	97.5	95.7	100.0	100.0	94.7	
WATEREE	2	350	67.8	87.4	93.2	100.0	100.0	90.2	91.8	100.0	100.0	97.3	100.0	55.3	84.2	100.0	92.6	
WILLIAMS		615	88.3	79.1	81.4	75.7	0.0	29.3	100.0	100.0	100.0	96.5	100.0	83.3	100.0	95.2	80.0	
FOSSIL TOTALS		2484	87.0	82.5	84.6	86.1	65.6	70.9	93.0	98.6	98.4	94.0	86.7	67.4	78.3	87.1	84.2	
JASPER CC	1	156	83.6	84.3	88.6	100.0	80.5	70.1	100.0	86.0	100.0	100.0	99.6	100.0	50.1	77.2	87.6	
JASPER CC	2	163	85.0	84.3	92.2	100.0	95.3	97.5	100.0	100.0	100.0	100.0	99.6	100.0	46.3	67.1	91.4	
JASPER CC	3	150	84.9	86.4	92.5	100.0	95.3	97.5	100.0	100.0	96.8	99.1	91.1	100.0	50.1	79.5	91.8	
JASPER ST	4	383	70.6	86.1	93.5	100.0	95.3	100.0	99.9	99.5	99.3	100.0	99.6	100.0	50.1	78.6	92.9	
URQUHART CC	5	162	91.7	94.4	78.2	100.0	82.7	100.0	86.6	85.5	83.7	98.7	66.7	0.0	35.3	100.0	76.3	
URQUHART CC	1	66	92.2	93.2	79.8	100.0	82.7	100.0	86.6	95.4	89.6	98.7	66.7	0.0	38.8	100.0	78.0	
URQUHART CC	6	171	95.3	80.7	87.5	100.0	89.3	48.1	42.1	97.3	100.0	100.0	98.8	81.2	99.8	100.0	87.0	
URQUHART CC	2	68	95.2	80.5	87.6	100.0	89.3	48.1	41.3	98.4	99.3	100.0	100.0	81.0	100.0	100.0	87.0	
CC TOTALS ¹		1319	87.3	86.2	87.5	100.0	88.8	82.6	82.0	95.3	96.1	99.6	90.2	70.3	58.8	87.8	86.5	
V.C. SUMMER	1	966	88.9	99.5	84.4	97.2	100.0	83.3	0.0	55.8	100.0	100.0	100.0	100.0	100.0	100.0	85.1	

Note 1: CC designates Combined-Cycle units

Office of Regulatory Staff
Power Plant Performance Data Report
Capacity Factors (Percentage) for
South Carolina Electric & Gas Company

PLANT	UNIT	HISTORICAL DATA				REVIEW PERIOD (ACTUAL) DATA												Average Review Pd
		NET MW RATING	LIFE TIME	YEAR 2006	YEAR 2007	YEAR 2008	FEB 2008	MAR 2008	APR 2008	MAY 2008	JUN 2008	JUL 2008	AUG 2008	SEP 2008	OCT 2008	NOV 2008	DEC 2008	
CANADYS	1	105	80.7	69.0	43.8	67.6	68.8	94.5	88.1	34.4	84.4	86.1	58.3	73.3	64.2	71.2	21.9	67.7
CANADYS	2	115	79.7	69.9	67.6	50.0	0.0	15.8	79.2	91.6	73.1	78.1	68.4	67.3	58.1	0.0	44.2	52.3
CANADYS	3	185	51.1	69.7	77.8	66.4	77.6	79.9	41.1	70.8	88.1	76.8	82.1	78.9	36.8	68.7	20.8	65.6
COPE		420	78.5	93.1	90.0	71.0	99.4	81.3	61.0	97.1	95.8	97.0	95.9	0.0	0.0	48.5	80.2	68.7
McMEEKIN	1	125	68.9	76.7	81.9	80.3	87.8	0.5	92.9	95.6	94.5	96.2	95.9	85.8	66.4	80.6	77.0	79.4
McMEEKIN	2	125	69.1	73.0	59.0	82.9	91.2	57.6	77.4	92.8	93.7	93.8	83.2	90.4	45.9	87.8	88.5	82.0
URQUHART	3	94	74.7	80.6	86.5	77.2	86.5	96.5	31.6	79.8	89.4	92.0	72.3	89.6	88.2	65.2	47.2	76.2
WATEREE	1	350	69.7	79.2	68.2	79.7	71.2	77.5	48.0	96.1	87.5	88.9	84.7	85.7	84.8	82.5	74.6	80.1
WATEREE	2	350	69.8	60.7	72.9	79.5	78.0	87.2	81.9	74.6	91.4	89.6	84.5	91.3	46.9	65.4	75.9	78.8
WILLIAMS		615	67.7	83.4	70.9	76.2	64.6	0.0	25.0	96.5	97.2	96.1	92.8	95.7	78.4	95.9	81.7	74.9
FOSSIL TOTALS		2484	70.9	78.6	74.3	74.5	74.8	54.2	55.0	87.8	91.9	91.3	86.5	73.0	55.1	71.8	69.6	73.7
JASPER CC	1	156	n/a	25.1	29.7	33.9	26.7	32.8	26.7	23.4	51.5	47.4	48.8	44.6	32.9	7.1	12.4	32.2
JASPER CC	2	163	n/a	27.0	35.3	37.5	28.6	62.6	43.2	34.0	50.0	44.1	46.4	41.3	49.9	1.6	4.8	36.9
JASPER CC	3	150	n/a	25.2	30.1	38.6	12.5	39.0	51.4	61.7	66.8	40.0	51.8	33.8	35.4	8.5	13.0	37.6
JASPER ST	4	383	n/a	19.5	24.5	26.6	15.1	31.4	27.6	26.9	46.0	32.3	38.7	30.5	26.5	3.6	6.7	25.9
URQUHART CC	5	162	n/a	17.9	22.9	20.3	7.5	9.4	38.6	14.4	41.5	21.8	36.3	28.5	0.0	10.3	11.0	19.9
URQUHART CC	1	66	n/a	20.0	24.8	22.1	8.2	11.4	44.1	16.2	42.7	23.4	39.7	30.6	0.0	11.5	10.9	21.7
URQUHART CC	6	171	n/a	15.4	20.8	18.5	1.2	8.5	0.0	13.1	54.6	25.9	22.9	24.5	17.2	25.5	6.8	18.2
URQUHART CC	2	68	n/a	17.4	22.7	20.4	1.1	9.4	0.0	15.1	61.9	28.0	23.9	26.0	19.0	29.1	7.3	20.1
CC TOTALS ¹		1319	n/a	n/a	26.3	27.8	14.0	28.5	29.3	26.9	50.7	33.6	39.3	32.6	25.0	9.7	8.6	27.1
V.C. SUMMER	1	966	80.9 ²	88.3	100.1	84.2	96.3	100.7	82.1	0.0	51.1	99.9	99.7	100.0	100.5	100.7	101.5	84.8

Note 1: CC designates Combined-Cycle units

Note 2: The lifetime nuclear unit capacity factor for V.C. Summer is through December 2008

**Office of Regulatory Staff
Fossil Unit Outage Report
(100 Hrs or Greater Duration) for
South Carolina Electric and Gas Company**

UNIT	DATE OFF	DATE ON	HOURS	TYPE	EXPLANATION OF OUTAGE
Canadys #1	05/05/08	05/19/08	349.95	Planned	Unit was taken offline for annual Spring Outage
Canadys #1	11/28/08	12/21/08	570.98	Planned	Unit was taken offline for annual Fall Outage
Canadys #2	1/11/2008 ¹	03/24/08	1772.38	Planned	Unit was taken offline due to a turbine generator overhaul, division wall tube replacements, coal mill overhaul, and coal feeder replacement
Canadys #2	10/24/08	12/02/08	926.58	Planned	Unit was taken offline for annual Fall Outage
Canadys #3	04/14/08	04/30/08	396.98	Planned	Unit was taken offline for annual Spring Outage
Canadys #3	07/26/08	08/02/08	146.43	Forced/ Maintenance	Unit was forced offline due to lightning strike Unit remained offline to repair boiler leak and overhaul high pressure heater valve
Canadys #3	10/11/08	10/27/08	404.83	Planned	Unit was taken offline for annual Fall Outage
Canadys #3	11/26/08	11/29/08	76.10	Forced/ Maintenance	Unit was forced offline due to F.D. fan control governor failure Unit remained offline to repair a boiler tube leak
Cope	04/04/08	04/13/08	217.63	Planned	Unit was taken offline for annual Spring Outage
Cope	08/31/08	11/12/08	1749.02	Planned	Unit was taken offline for a planned eleven week outage for SCR installation
McMeekin #1	03/01/08	03/31/08	726.75	Planned	Unit was taken offline for annual Spring Outage
McMeekin #1	10/03/08	10/12/08	202.10	Planned	Unit was taken offline for annual Fall Outage
McMeekin #2	03/19/08	04/05/08	396.08	Forced/ Planned	Unit was forced offline due to a hydraulic oil line break in turbine front standard Unit remained offline for annual Spring Outage
McMeekin #2	10/04/08	10/18/08	336.70	Planned	Unit was taken offline for annual Fall Outage
Urquhart #3	04/12/08	04/25/08	322.08	Maintenance	Unit was taken offline to repair turbine front standard and to complete other maintenance work
Urquhart #3	04/25/08	05/02/08	167.72	Startup Failure	Unit went into startup failure to repair a disconnect switch
Waterree #1	1/29/2008 ²	02/02/08	115.72	Maintenance	Unit was taken offline due to a CRV Valve packing blowout
Waterree #1	03/29/08	04/11/08	325.58	Planned	Unit was taken offline for annual Spring Outage
Waterree #2	10/10/08	10/24/08	327.40	Planned	Unit was taken offline for annual Fall Outage
Williams	02/22/08	04/21/08	1415.85	Planned	Unit was taken offline for annual Spring Outage
Williams	10/24/08	10/30/08	120.78	Planned	Unit was taken offline for annual Fall Outage

Note 1: This outage began before the review period.

Note 2: This outage began before the review period.

**Office of Regulatory Staff
Fossil Unit Outage Report
(100 Hrs or Greater Duration) for
South Carolina Electric & Gas Company**

UNIT	DATE OFF	DATE ON	HOURS	TYPE	EXPLANATION OF OUTAGE
Jasper #1	03/17/08	03/22/08	125.73	Forced	Unit was forced offline due to a warped condenser valve
Jasper #1	04/13/08	04/20/08	168.00	Planned	Unit was taken offline for a hot end inspection
Jasper #1	06/20/08	06/24/08	101.00	Maintenance	Unit was taken offline to repair leaking coils
Jasper #1	11/16/08	12/08/08	529.50	Planned	Unit was taken offline to repair exhaust bearing support and replace feedwater valve
Jasper #2	11/16/08	12/11/08	604.57	Planned	Unit was taken offline due to a planned outage
Jasper #3	11/16/08	12/07/08	512.57	Planned	Unit was taken offline due to a planned outage
Jasper #4	11/16/08	12/07/08	519.32	Planned	Unit was taken offline due to a planned outage
Urquhart #1	03/23/08	03/28/08	123.07	Maintenance	Unit was taken offline to perform annual inspection of exciter
Urquhart #1	05/01/08	05/05/08	100.00	Maintenance	Unit was taken offline to repair a combustion chamber
Urquhart #1	09/21/08	11/19/08	1425.63	Planned	Unit was taken offline due to a Major Turbine Overhaul
Urquhart #2	03/28/08	04/03/08	143.12	Maintenance	Unit was taken offline to perform annual inspection of exciter
Urquhart #2	04/18/08	05/19/08	741.80	Maintenance	Unit was taken offline to repair a 6GT Turbine Blade
Urquhart #2	10/20/08	10/25/08	137.83	Maintenance	Unit was taken offline due to a 4160 Volt Circuit Breaker
Urquhart #5	03/23/08	03/28/08	123.07	Maintenance	Unit was taken offline to perform annual borescope inspection and other maintenance
Urquhart #5	05/01/08	05/05/08	100.00	Maintenance	Unit was taken offline to repair a combustion chamber
Urquhart #5	07/01/08	07/06/08	105.50	Maintenance	Unit was taken offline to replace Generator Bearing
Urquhart #5	09/21/08	11/19/08	1418.45	Planned	Unit was taken offline due to a Major Turbine Overhaul
Urquhart #6	03/28/08	04/03/08	143.12	Maintenance	Unit was taken offline to perform annual borescope inspection and other maintenance
Urquhart #6	04/18/08	05/18/08	735.97	Maintenance	Unit was taken offline to repair a 6GT Turbine Blade
Urquhart #6	10/20/08	10/25/08	137.83	Maintenance	Unit was taken offline due to a Fuel Gas Piping Repair

**Office of Regulatory Staff
V.C. Summer Nuclear Unit Outage Report for
South Carolina Electric & Gas Company**

NO.	DATE OFF	DATE ON	HOURS	TYPE	EXPLANATION OF OUTAGE
1	1/24/2008 ¹	02/01/08	195.55	Forced	Unit was forced off line due to the failure of the "C" Feedwater Flow Control Valve Positioner
2	04/25/08	06/14/08	1181.13	Planned	Unit was taken offline for Refueling Cycle 17
3	06/14/08	06/14/08	1.77	Planned	Unit was taken offline for a Turbine Overspeed Trip test

Note 1: This outage began before the review period.

**Office of Regulatory Staff
Generation Mix Report for
South Carolina Electric & Gas Company**

(February 1, 2008 - December 31, 2008)

<u>MONTH</u>	<u>PERCENTAGE</u>					
	<u>FOSSIL</u>	<u>NUCLEAR</u>	<u>COMBINED CYCLE</u>	<u>COMBUSTION TURBINE</u>	<u>HYDRO</u>	<u>PURCHASED POWER</u>
2008						
February	68	22	6	0	3	1
March	55	25	15	0	3	2
April	56	21	15	0	4	4
May	79	0	13	0	4	4
June	64	9	18	1	4	4
July	64	18	12	0	4	2
August	62	18	14	0	4	2
September	59	20	14	0	4	3
October	54	25	12	0	4	5
November	66	24	5	0	3	2
December	67	25	4	0	3	1
Avg =	63	19	11	0	4	3

**Office of Regulatory Staff
Generation Statistics for Major Plants for
South Carolina Electric & Gas Company**

(February 1, 2008 - December 31, 2008)

PLANT	TYPE FUEL	AVERAGE FUEL COST (CENTS/KWH ¹)	GENERATION (MWH)
V.C. Summer ²	Nuclear	0.46	4,414,113
Cope	Coal	2.90	2,321,803
Urquhart	Coal	3.04	576,166
McMeekin	Coal	3.27	1,619,477
Williams	Coal	3.37	3,704,949
Wateree	Coal	3.44	4,473,854
Canadys	Coal	3.52	2,030,954
Jasper CC	Gas	8.11	2,144,891
Urquhart CC	Gas	9.30	734,009

Note 1: The average fuel costs for coal-fired plants include oil and/or gas cost for start-up and flame stabilization.

Note 2: Generation Statistics for V.C. Summer represents SCE&G's 2/3 ownership.

Office of Regulatory Staff
SC Retail Comparison of Estimated to Actual Energy Sales
for South Carolina Electric & Gas Company

2008	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>TOTAL</u>
[1] ESTIMATED SALES [MWH]	1,858,000	1,710,000	1,612,000	1,728,000	2,040,000	2,249,000	2,268,000	2,112,000	1,765,000	1,609,000	1,764,000	20,715,000
[2] ACTUAL SALES [MWH]	1,822,584	1,655,323	1,632,957	1,639,360	2,007,728	2,226,603	2,157,148	2,078,373	1,657,597	1,505,277	1,784,128	20,167,077
[3] AMOUNT DIFFERENCE [1]-[2]	35,416	54,677	-20,957	88,640	32,272	22,397	110,852	33,627	107,403	103,723	-20,128	547,923
[4] PERCENT DIFFERENCE [3]/[2]	1.94%	3.30%	-1.28%	5.41%	1.61%	1.01%	5.14%	1.62%	6.48%	6.89%	-1.13%	2.72%

Office of Regulatory Staff
SC Retail Comparison of Estimated to Actual Fuel Cost (Cents/kWh)
for South Carolina Electric & Gas Company

	2008	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>PERIOD</u>
[1] ORIGINAL PROJECTION	FEB 2.1457	2.5703	2.5735	2.3924	2.8510	2.9985	2.9570	2.9890	2.9410	2.6300	2.6820	2.7225
[2] ACTUAL EXPERIENCE	2.3476	2.8417	3.1153	3.9611	4.5870	3.2442	3.9476	3.4431	3.3988	3.8099	3.1965	3.4581
[3] AMOUNT IN BASE	2.6300	2.6300	2.6300	2.6410	2.6410	2.6410	2.6410	2.6410	2.6410	3.2910	3.2910	2.7562
[4] VARIANCE	-8.60%	-9.55%	-17.39%	-39.60%	-37.85%	-7.57%	-25.09%	-13.19%	-13.47%	-30.97%	-16.10%	-21.27%
FROM ACTUAL [1-2]/[2]												

**South Carolina
Office of Regulatory Staff
History of Cumulative Recovery Account Report for
South Carolina Electric & Gas Company**

<u>PERIOD ENDING</u>	<u>OVER (UNDER)\$</u>
January 1979 – Automatic Fuel Adjustment in Effect	
July-79	4,427,600
April-80	7,608,796
October-80	(462,050)
April-81	2,188,451
October-81	(10,213,138)
April-82	5,164,628
October-82	9,937,268
April-83	9,767,185
October-83	(4,527,441)
April-84	(2,646,395)
October-84	(3,211,158)
April-85	(9,545,054)
October-85	(6,115,435)
April-86	2,474,301
October-86	(540,455)
April-87	(353,393)
October-87	(3,163,517)
April-88	9,247,139
October-88	2,717,342
April-89	(5,665,737)
October-89	(8,777,726)
April-90	(5,288,612)
October-90	6,536,591
April-91	7,180,922
October-91	4,160,275
April-93	15,835,472
October-93	15,449,670
April-93	16,006,551
October-93	10,069,457
April-94	2,646,301
October-94	(265,302)
April-95	6,622,597
October-95	4,202,766
February-97	4,914,169
February-98	596,797
February-99	(1,303,094)
February-00	(124,599)
February-01	(60,454,498)
February-02	(16,421,821)
February-03	(17,429,464)
February-04	(20,532,126)
January-05	(23,979,198)
January-06	(54,743,186)
January-07	(52,562,505)
January-08	(28,848,155)
December-08	(130,199,721)

**Office of Regulatory Staff
Calculation of Base Fuel Cost Component
with Three-Year Recovery Period for Base Fuel Undercollection
South Carolina Electric & Gas Company**

1. Projected Data (May, 2009 - April, 2010)

Cost of Fuel (000's)	\$ 815,312
System Sales (GWH)	22,888
Fuel Rate (Cents/KWH)	3.562

2. (Over)/Under Collection (000's) through April, 2009

	\$ 37,156
South Carolina Retail Sales (GWH)	22,437
(Over)/Under Collection Rate (Cents/KWH)	0.166

3. Base Fuel Cost Component (Cents/KWH)

Projected Fuel Rate	3.562
Carrying Costs	0.007
Fixed Capacity Charges & Adjustments	(0.095)
Unbilled Fuel Cost Recovery Adjustment	<u>(0.019)</u>
Total Projected Fuel Rate	3.455
(Over)/Under Recovery Rate	<u>0.166</u>
Total Base Fuel Cost Component	<u><u>3.621</u></u>

Office of Regulatory Staff
Environmental Fuel Component Summary
South Carolina Electric & Gas Company
May 2009 - April 2010

EXHIBIT ARW-9

Customer Class	SCE&G Environmental Fuel Cost (\$)	ORS Environmental Fuel Cost Adjustment (\$)	ORS Environmental Fuel Cost (\$)	Class Sales (kWh)	ORS Environmental Fuel Component (¢/kWh)
Residential	10,895,629	(6,837,814)	4,057,815	8,083,000,000	0.050
Small General Service	3,801,280	(2,425,010)	1,376,270	3,361,000,000	0.041
Medium General Service	2,415,375	(1,569,526)	845,849	2,541,000,000	0.033
Large General Service	5,276,834	(3,249,298)	2,027,536	8,210,000,000	0.025
Totals =	22,389,118	(14,081,648)	8,307,470	22,195,000,000	0.037

Office of Regulatory Staff
Proposed Fuel Factors for
South Carolina Electric & Gas Company
May 2009 - April 2010

Customer Class	SCE&G Proposed Factors 2 Yr Amortization (¢/kWh)			ORS Proposed Fuel Factor 3 Yr Amortization (¢/kWh)		
	Base Fuel Factor (¢/kWh)	Environmental Fuel Factor (¢/kWh)	Total Fuel Factor (¢/kWh)	Base Fuel Factor (¢/kWh)	Environmental Fuel Factor (¢/kWh)	Total Fuel Factor (¢/kWh)
Residential	3.707	0.135	3.842	3.621	0.050	3.671
Small Gen. Service	3.707	0.113	3.820	3.621	0.041	3.662
Med. Gen. Service	3.707	0.095	3.802	3.621	0.033	3.654
Large Gen. Service	3.707	0.064	3.771	3.621	0.025	3.646
Lighting	3.707	0	3.707	3.621	0	3.621